

## AMENDMENTS TO THE CLAIMS

Claims 1-44 (Canceled)

45. (New) A method of making a substrate comprising a plurality of gold electrodes comprising:

- a) coating an adhesion metal onto a fiberglass substrate;
- b) coating gold onto said adhesion metal; and
- c) forming a pattern comprising said plurality of electrodes and associated interconnects

using lithography.

46. (New) A method according to claim 45 further comprising adding a self-assembled monolayer (SAM) to each electrode.

47. (New) A method according to claim 45 wherein said SAM comprises a species comprising a capture ligand.

48. (New) A method according to claim 45 wherein said SAM is added using an aqueous deposition step.

49. (New) A method of making a substrate comprising a plurality of gold electrodes comprising:

- a) coating an adhesion metal onto said substrate;
- b) coating gold onto said adhesion metal;
- c) forming a pattern comprising said plurality of electrodes and associated interconnects

using photolithography;

d) adding a self-assembled monolayer (SAM) comprising a capture ligand to each electrode.

50. (New) A method according to claim 49 wherein said SAM is added using an aqueous deposition step.